

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P276587

Luminaire Tested: **24CZ2-45-S-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P276587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-45-S-UNV-L82765-W2A1-U-6500K
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER
WITH SMOOTH LENS
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4708.6 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.27 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

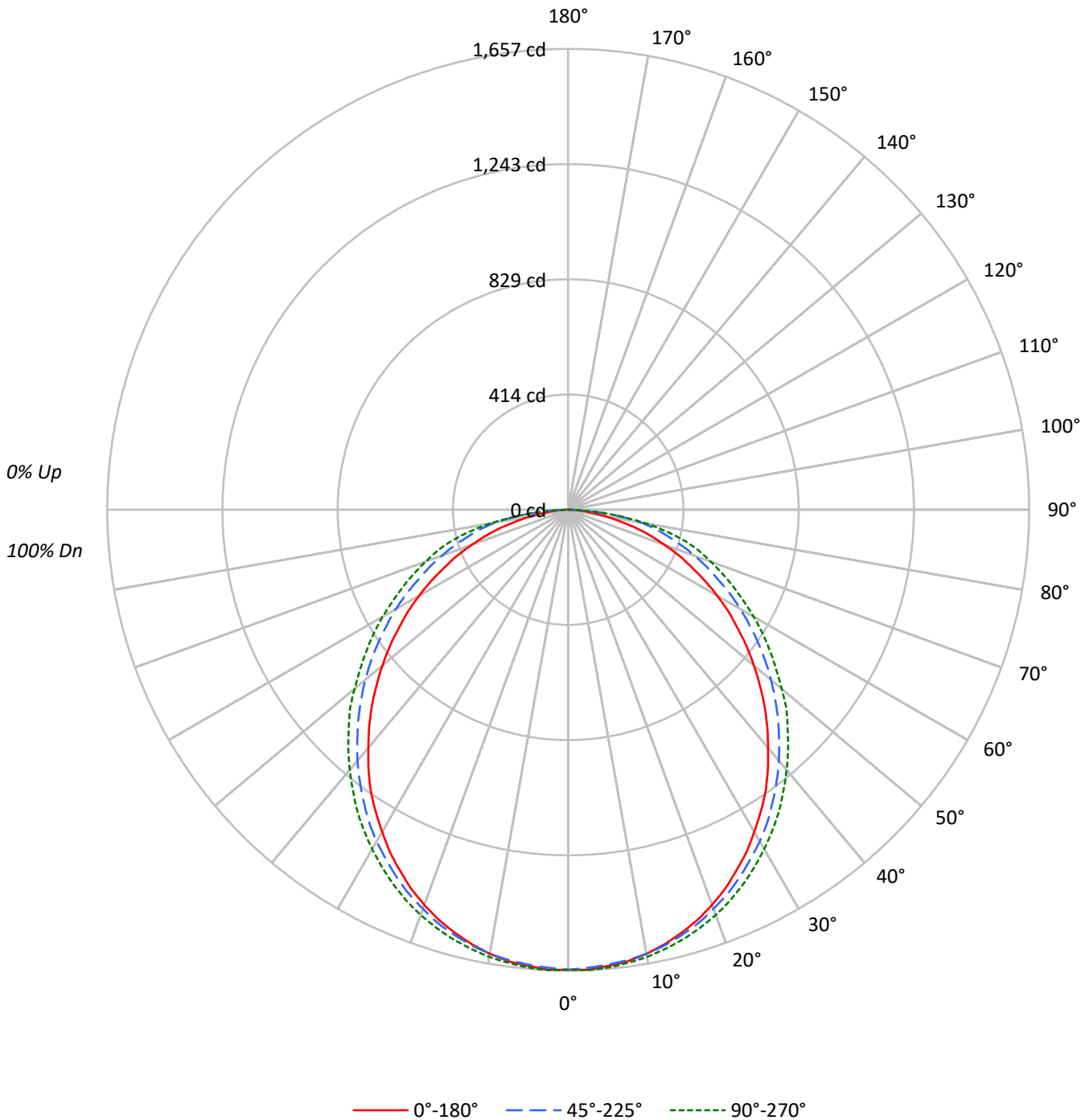
Input Watts (W): 36.549
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2226	2226	2226
5°	2224	2218	2232
10°	2215	2215	2231
15°	2194	2204	2227
20°	2165	2186	2221
25°	2125	2165	2207
30°	2077	2140	2189
35°	2032	2105	2172
40°	1962	2070	2146
45°	1898	2029	2123
50°	1825	1991	2098
55°	1744	1954	2077
60°	1662	1924	2073
65°	1557	1890	2086
70°	1441	1900	2142
75°	1291	1936	2262
80°	1043	2051	2214
85°	786	1802	1755



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	156.6	3.3
10°-20°	447.5	9.5
20°-30°	672.6	14.3
30°-40°	801.2	17.0
40°-50°	820.0	17.4
50°-60°	738.2	15.7
60°-70°	579.8	12.3
70°-80°	376.3	8.0
80°-90°	116.4	2.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1276.7	27.1
0°-40°	2077.9	44.1
0°-60°	3636.1	77.2
0°-90°	4708.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4708.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1654	1654	1654	1654	1654	
5°	1647	1650	1642	1651	1653	156
15°	1575	1579	1582	1596	1599	444
25°	1431	1443	1458	1482	1487	659
35°	1237	1252	1282	1313	1322	772
45°	998	1022	1066	1107	1116	769
55°	743	776	833	876	885	666
65°	489	526	594	643	655	487
75°	248	296	372	423	435	263
85°	51	94	117	114	114	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1654.1	1654.1	1654.1	1654.1	1654.1
2.5°	1655.6	1655.6	1648.2	1655.6	1657.1
5°	1646.7	1649.7	1642.2	1651.2	1652.6
7.5°	1637.7	1637.7	1633.2	1642.2	1643.7
10°	1621.2	1622.7	1621.2	1631.7	1633.2
12.5°	1600.3	1603.3	1604.8	1615.3	1616.8
15°	1574.9	1579.4	1582.4	1595.8	1598.8
17.5°	1546.5	1550.9	1558.4	1573.4	1576.4
20°	1512.1	1518.0	1527.0	1546.5	1550.9
22.5°	1474.7	1480.7	1495.6	1513.6	1521.0
25°	1431.3	1443.3	1458.2	1482.1	1486.6
27.5°	1387.9	1398.4	1417.8	1443.3	1449.2
30°	1337.1	1353.5	1377.5	1402.9	1408.9
32.5°	1287.7	1304.2	1332.6	1359.5	1367.0
35°	1236.9	1251.8	1281.7	1313.1	1322.1
37.5°	1178.5	1198.0	1230.9	1262.3	1271.3
40°	1117.2	1141.2	1178.5	1211.4	1221.9
42.5°	1058.9	1084.3	1121.7	1157.6	1169.6
45°	997.6	1021.5	1066.4	1106.8	1115.7
47.5°	934.8	961.7	1009.5	1049.9	1064.9
50°	871.9	900.4	951.2	993.1	1002.1
52.5°	809.1	839.0	892.9	937.7	942.2
55°	743.3	776.2	833.1	876.4	885.4
57.5°	683.5	711.9	773.2	818.1	828.6
60°	617.7	649.1	714.9	756.8	770.2
62.5°	554.9	587.8	656.6	698.4	710.4
65°	489.1	526.5	593.8	643.1	655.1
67.5°	432.2	468.1	539.9	587.8	599.7
70°	366.4	406.8	483.1	532.4	544.4
72.5°	309.6	351.5	427.7	475.6	493.6
75°	248.3	296.1	372.4	423.3	435.2
77.5°	188.4	243.8	321.6	360.4	360.4
80°	134.6	192.9	264.7	282.7	285.7
82.5°	88.2	145.1	195.9	194.4	194.4
85°	50.9	94.2	116.7	113.7	113.7
87.5°	19.4	38.9	41.9	41.9	40.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)